

CLAIMS

What is claimed is:

1. An air conditioning system for a vehicle comprising:
a compressor for compressing a refrigerant,
5 a condenser for condensing the refrigerant,
an evaporator for evaporating the refrigerant,
a discharge fluid line interconnecting the compressor and said
condenser,
a liquid fluid line interconnecting said condenser and said evaporator,
10 a suction fluid line interconnecting said evaporator and said
compressor,
an accumulator/dehydrator (A/D) disposed in said suction fluid line for
accumulating refrigerant, and
a heat transfer jacket surrounding said A/D for exchanging heat with
15 said A/D and the refrigerant therein.
2. A system as set forth in claim 1 wherein said heat transfer jacket
defines a space surrounding said A/D and a heat transfer media disposed in said space
for cooling by extracting heat from the refrigerant in said A/D.
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3. A system as set forth in claim 2 wherein said space is defined by an
inner wall of said A/D and outer wall spaced therefrom.
4. A system as set forth in claim 2 wherein said jacket is defined by a
25 double walled sleeve surrounding said A/D and defining said space between said
walls thereof.

5. A system as set forth in claim 1 wherein said heat transfer jacket comprises a thermoelectric device.

6. A method of operating an air conditioning system of the type including
5 a compressor for compressing a refrigerant, a condenser for condensing the refrigerant, an evaporator for evaporating the refrigerant, a discharge fluid line interconnecting the compressor and the condenser, a liquid fluid line interconnecting the condenser and the evaporator, a suction fluid line interconnecting the evaporator and the compressor, and an accumulator/dehydrator A/D disposed in the suction fluid
10 line for accumulating refrigerant, said method comprising the steps of surrounding the A/D with a heat transfer jacket and exchanging heat with the A/D and the refrigerant therein.

7. A method as set forth in claim 6 further defined as surrounding the
15 A/D with a space and disposing a heat transfer media in the space for cooling by extracting heat from the refrigerant in the A/D.

8. A method as set forth in claim 7 further defined as disposing an outer wall about an inner wall of the A/D to provide the space.

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9. A method as set forth in claim 7 further defined as disposing a double walled sleeve about the A/D to define the space between the walls thereof.

10. A method as set forth in claim 6 further defined as disposing a
25 thermoelectric device about the A/D to define the jacket.